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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,221	12/01/2003	Hiroshi Kamohara	0171-1044P	9834
2292 7590 11/06/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER PENG, KUO LIANG	
			ART UNIT 1796	PAPER NUMBER
			NOTIFICATION DATE 11/06/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/724,221	Applicant(s) KAMOHARA ET AL.	
	Examiner Kuo-Liang Peng	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/21/07 RCE.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,8,12,21-28,30-35 and 37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-28 and 30-35 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,8,12,22-24 and 36 is/are rejected.
- 7) ☒ Claim(s) 21 and 37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/13/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on September 21, 2007 has been entered. Claims 3, 6-7, 9-11, 13-20 and 29 are deleted. Claims 36-37 are added. Now, Claims 1-2, 4-5, 8, 12, 21-28 and 30-37 are pending.

2. The text of those sections of Title 35, U.S. code not included in this action can be found in prior Office Action(s).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 5 (lines 10-11), should the phrase “the organopolysiloxane containing at least 5 mol% of diphenylsiloxane units or at least 10 mol% of methylphenylsiloxane units,” be removed because it is not supported in Claim 1.

Claim Rejections - 35 USC § 102

5. Claims 1-2, 4-5, 12, 22-24 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by JP837 (JP 59-025837).

For Claims 1, 2, 5, 12 and 22-24, JP837 discloses a method of preparing a cured product derived from a composition comprising A) a polyether containing alkenyl groups and B) a polyorganosiloxane containing a specific amount of aryl (e.g., phenyl) groups. Component B) can have substituents such as alkenyl groups. (col. 6-10 and Table 1) The composition can be cured by hydrosilylation. A crosslinker containing at least two Si-H groups can be present. (col. 11-12) The ingredients in composition are further exemplified in Examples and Table 1. Since JP837's composition reads on the claimed one, both should possess the same

properties including contact angle. The composition can be used in building or medical applications. (col. 16)

For Claim 4, “dental impression material” is merely an intended use.

For Claim 36, notably, the polyether component typically presents in a form of certain molecular weight distribution, i.e., containing polyethers having different molecular weights. Thus, the polyether component does contain at least two polyethers.

Claim Rejections - 35 USC § 103

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zech (US 5 849 812) in view of JP837.

Zech discloses an addition-crosslinking polyether dental impression composition. (col. 3, lines 3-13) Zech is silent on the specific use of the claimed composition. However, JP837 discloses a composition comprising A) and B) for **medical** use, *supra*, which is incorporated herein by reference. As such, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize JP837's composition for making a **dental impression** with expected success. The motivation is to afford a dental impression with enhanced properties such as optical transparency, tensile, etc. (col. 15-16)

7. Claims 21 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the above references, taken alone or in combination, teaches or fairly suggests the claimed polyether.

Allowable Subject Matter

8. Claims 25-28 and 30-35 are allowed.

9. The following is an examiner's statement of reasons for allowance:

The present claims are allowable for at least the following reason(s) over the closest references: Nitzsche (US 3 070 566), Bryan (US 4 657 959), Chikuni (US 5 768 414) and JP837.

Nitzsche discloses a composition comprising a hydroxy-containing diorganopolysiloxane, a crosslinking agent and a catalyst. (col. 1, lines 55-61 and Examples) The amount of the phenyl group in the diorganopolysiloxane can be exemplified in Examples. The composition can be used in a dental impression composition, a building composition, etc. (col. 4, lines 26-31) Nitzsche is silent on

the use of a polyether set forth in the present invention. Furthermore, Bryan teaches the use of a polyether in a silicone dental impression material. The motivation is to adjust the surface properties such as water contact angle of the dental impression material. (col. 1, lines 5-10, col. 5, line 56 to col. 6, line 38, Table 1) In light of the benefit mentioned, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate Bryan's polyether into Nitzsche's composition. Furthermore, it is well known to add a polyethylene glycol in a building member composition. For example, Chikuni teaches a polyethylene glycol as a thixotropic agent in a building member composition. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the polyethylene glycol into Nitzsche's building member composition. However, none of Nitzsche, Bryan and Chikuni, taken alone or in combination, teaches or fairly suggests the **polyether** where R^1 is a) $C_3H_6SiR_k^2(OR^2)_{3-k}$ with at least one R^2 is an alkenyl group or b) an alkenyl group set forth in Claims 22 and 25.

JP837 does not teach or fairly suggest the **polyether** where R^1 is a) $C_3H_6SiR_k^2(OR^2)_{3-k}$ with at least one R^2 is an alkenyl group or b) an alkenyl group set forth in Claims 22 and 25.


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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp
October 15, 2007


Kuo-Liang Peng
Primary Examiner
Art Unit 1796